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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/644,389	08/23/2000	Edward F. Kachnic	2000-1220-RA	1510

30184 7590 08/11/2003

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EXAMINER

CABRERA, ZOILA E

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 08/11/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/644,389

Applicant(s)

KACHNIC ET AL.

Examiner

Zoila E. Cabrera

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Choi (US 6,275,741)** in view of the admitted Prior Art (Page 7, lines 18-25; Page 8, lines 1-14).

Choi discloses an integrated controller comprising a machine controller, sensory electronics, and a user interface (Fig. 4, elements 44, 248, 426, 430) for use with a part forming machine (Col. 2, lines 49-54), comprising:

With respect to claims 17-21,

- a computer having a data interface (Fig. 1, element 24 and 44);
sensory electronics in communication with said data interface of said computer,
said sensory electronics outputting sensory data to said computer via said data interface (Fig. 4, elements 406, 24, 44);
a program for analyzing data from the sensory electronics and controlling the part forming machine and said sensory electronics in response to said sensory data (Col. 3, lines 1-5); and

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means for displaying information, said display means being in communication with said computer (Fig. 1, elements 38 and 44; Col. 4, lines 60-67), wherein said sensory electronics functionally communicates with said data interface of said computer (Fig. 1, elements 12, 14 20, 22 and 44; Fig. 4, elements 406, 44, 24) and wherein the injection-molding machine is functionally communicatable with said data interface of said computer (Fig. 1, injection molding machine 10 and a general purpose computer 44).

However, **Choi** fails to specifically disclose some limitations of claims 17-21 such as the type of sensors (vision sensor, infrared sensor, air pressure sensor, vacuum sensor, ultrasonic sensor) used in conjunction with the injection molding system and the use of those sensors for acquiring data regarding the status of a formed part relative to the mold of a part-forming machine or for acquiring data regarding the presence or absence of a formed part within the mold of the part-forming machine. However, on Page 7, lines 18-25 and Page 8, lines 1-14 under Background of the Invention, Applicant admits that different types of sensors such as vision sensors, infrared sensor, air pressure sensors, vacuum sensor and others have been conventionally used for acquiring status data of a formed part relative to the mold, see Page 7, lines 18-25, "various technologies have also been developed and ***used to sense or determine whether the hard molded plastic parts have indeed been dislodged and completely ejected or removed from the molds*** before the mechanical or hydraulic rams are allowed to close. ***Such technologies have included light beam sensors, visions systems, air pressure sensors, vacuum sensors and others***". On Page 8,

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lines 13-14, Applicant admits the use of infrared sensors for detecting any plastic retained in the mold. Applicant further admits means for sensing the presence or absence of a formed part within the mold, see Page 8, lines 10-12, "U.S. Patent No. 4,603,329 issued to Bangerter et al. shows an optoelectric sensor system coupled to a controller ***for sensing presence or absence of the molded plastic parts***".

Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of **Choi** and include sensors such as vision sensors, infrared sensors, air pressure sensors, vacuum sensors and others for sensing the status of a formed part as taught in the admitted Prior Art because it would provide an improved system with true real-time controlling (**Choi**, Col. 2, lines 16-18) by using position measurement devices for providing measurement of the actual position of the process (Col. 10, lines 21-22). Furthermore, it would provide an improved system capable of achieving injection molding device control loop updates on the order of milliseconds (Col. 6, lines 16-18) for monitoring the status of a device (Col. 6, lines 30-36).

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

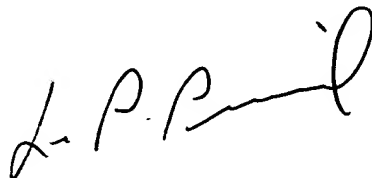
Any inquiry concerning communication or earlier communication from the examiner should be directed to Zoila Cabrera, whose telephone number is (703) 306-

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4768. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday).

If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached on (703) 308-0538. Additionally, the fax phones for Art Unit 2125 are (703) 308-6306 or 308-6296. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.

Zoila Cabrera
Patent Examiner
8/4/03

A handwritten signature in black ink, appearing to read "L. Picard", with a stylized flourish at the end.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100